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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,472	02/23/2005	Michael Overdick	DE 020155	3285
24737 7590 04/25/2007 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER SUNG, CHRISTINE	
			ART UNIT 2884	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/525,472

Applicant(s)

OVERDICK ET AL.

Examiner

Christine Sung

Art Unit

2884

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>0205, 0905</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement filed 9/12/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Charpentier (US Patent 5,291,018 A).

Regarding claim 1, Charpentier discloses a detector arrangement (figure 5) for the conversion of electromagnetic radiation into electrical signals (element 20), which arrangement includes sensitive areas (element 20), each of which corresponds to a respective electrical signal (element 20 = a pixel element), it being arranged that at least two of the sensitive areas mesh with one another (see figures 5 and 8).

Regarding claim 2, Charpentier discloses that the meshing of the sensitive areas with one another is achieved by dentation and/or interleaving (see figure 5 and 8).

Regarding claim 3, Charpentier discloses that the sampling properties of the sensitive areas are defined by a respective associated sensitive surface and that meshing is realized by way of the sensitive surfaces (see figures 5 and 8).

Regarding claim 5, Charpentier discloses that the sensitive areas are all of the same size (see figures 5 and 8).

Regarding claim 6, Charpentier discloses that the shape of the sensitive areas varies (see figures 5 and 8).

Regarding claim 7, Charpentier discloses the limitation set forth in claim 1 (see above). Charpentier does not explicitly specify an x-ray imager, however, the limitation is merely an intended use of the detector claimed in claim 1, and thus has not been given any patentable weight (See MPEP Section 2111.02).

Regarding claim 8, Charpentier discloses a method for the conversion of electromagnetic radiation into electrical signals, which method includes the following steps:

emission of electromagnetic radiation by a radiation source (column 3, lines 20-23),  
detection of the electromagnetic radiation by means of a detector arrangement which includes sensitive areas (Figure 5, elements 20),

conversion of the electromagnetic radiation into electrical signals (column 3, lines 24-43, discloses detection of radiation and conversion to signal),

where each time one of the sensitive areas corresponds unambiguously to a respective electrical signal (element 20 is a separate pixel element), and at least two of the sensitive areas mesh with one another (see figures 5 and 8), and propagation of the electrical signals.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charpentier (US Patent 5,291,018 A).

Regarding claim 4, Charpentier discloses sensitive areas (element 20), but does not explicitly disclose that such areas are formed by photodiodes or electrodes. However, electrodes/photodiodes are well known elements that are conventional to thermal detectors as disclosed by Charpentier. Such elements are necessary and inherent for reading out/detecting radiation. Thus it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have included photodiode/electrodes with the invention as disclosed by Charpentier in order to properly read out/detect radiation impinging on the sensitive areas of the detector.

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7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Charpentier (US Patent 5,291,018 A) in view of Marshall (US Patent 6,414,294 B1).

Regarding claim 7, Charpentier discloses the limitations set forth in claim 1, but does not disclose that the detector is included in an x-ray system. However, Marshall discloses an array imager (see figure 8, element 528) and further discloses the interchangeability of detectors between x-ray and infrared imagers (see column 15, lines 58-67). One of ordinary skill in the art would be motivated to adapt the detector disclosed by Charpentier for x-ray applications in order to reduce the impact of dead zones in an array of detectors in order to minimize aliasing.

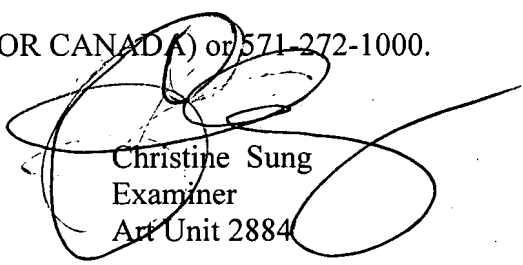
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Sung whose telephone number is 571-272-2448. The examiner can normally be reached on Monday- Friday 9-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christine Sung  
Examiner  
Art Unit 2884

CS